

MASIMO.1FW1C4



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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#14
CA
11-1502

Applicant	:	Diab, et al.)	Group Art Unit 3736
)	
Appl. No.	:	09/757,444)	
)	
Filed	:	January 9, 2001)	
)	
For	:	SIGNAL PROCESSING)	
		APPARATUS AND METHOD)	
)	
Examiner	:	Eric Winakur)	

Comments on Statement of Reasons for Allowance

In the Examiner's Statement of Reasons for Allowance, the Examiner mentions several references. Although it does not impact the reasons stated for patentability, Applicants wish to comment on the Examiner's statement that "others teach open-loop adaptive systems, see Conlon et al. (USPN 4,960,126) who teach an ECG synchronized pulse oximeter." Because the IEEE Standard Dictionary of Electrical and Electronic Terms, defines an adaptive system as "a system that has a means of monitoring its own performance and a means of varying its own parameters by *close-loop* action to improve its performance" (Dictionary page attached as Exhibit 1), under that definition, Conlon does not teach an "adaptive system." Although the claims stand allowed over this prior art, and the Examiner's characterization does not impact patentability, Applicants submit these comments to avoid any presumption of acquiescence.

Respectfully submitted,
KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: Oct. 2, 2002

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IEEE Standard Dictionary of Electrical and Electronics Terms

Frank Jay
Editor in Chief

J. A. Goetz,
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adaptive control system. *See:* control system, adaptive.

adaptive equalization (data transmission). A system that has a means of monitoring its own frequency response characteristics and a means of varying its own parameters by closed-loop action to obtain the desired overall frequency response. 59

adaptive maintenance (software). Maintenance performed to make a software product usable in a changed environment. *See:* maintenance; software product. 434

adaptive system. A system that has a means of monitoring its own performance and a means of varying its own parameters by closed-loop action to improve its performance. *See:* system science. 209

Adcock antenna. A pair of vertical antennas separated by a distance of one-half wavelength or less, and connected in phase opposition to produce a radiation pattern having the shape of the figure eight in all planes containing the centers of the two antennas. *See also:* antenna. 111

add and subtract relay. A stepping relay that can be pulsed to rotate the movable contact arm in either direction. *See:* relay. 259

adder. A device whose output is a representation of the sum of the two or more quantities represented by the inputs. *See:* half-adder. *See:* electronic analog computer. 235, 210, 54, 77

addition agent (electroplating). A substance that, when added to an electrolyte, produces a desired change in the structure or properties of an electrodeposited, without producing any appreciable change in the conductivity of the electrolyte, or in the activity of the metal ions or hydrogen ions. *See:* electroplating. 328

address (A) (1) (semiconductor memory). Those inputs whose states select a particular cell or group of cells. 441

(2) (electronic computations and data processing). (A) An identification, as represented by a name, label, or number, for a register, location in storage, or any other data source or destination such as the location of a station in a communication network. (B) Loosely, any part of an instruction that specifies the location of an operand for the instruction. (C) (electronic machine-control system). A means of identifying information or a location in a control system. *Example:* The x in the command x 12345 is an address identifying the numbers 12345 as referring to a position on the x axis. 224, 207, 255, 77

(3) (software). (A) A character or group of characters that identifies a register, a particular part of storage, or some other data source or destination. (B) To refer to a device or an item of data. *See:* data. 434

address, effective (computing systems). The address that is derived by applying any specified rules (such as rules relating to an index register or indirect address) to the specified address and that is actually used to identify the current operand. 77

address format (computing machines). The arrangement of the address parts of an instruction. *Note:* The expression plus-one is frequently used to indicate that

one of the addresses specifies the location of the next instruction to be executed, such as one-plus-one, two-plus-one, three-plus-one, four-plus-one. 255, 77

address part. A part of an instruction that usually is an address, but that may be used in some instructions for another purpose. *See:* instruction code. 235

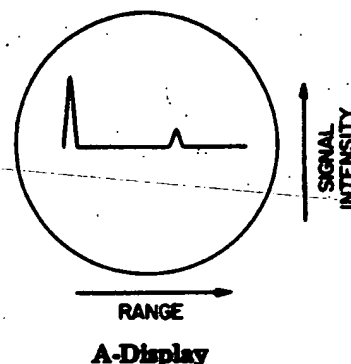
address register (computing machines). A register in which an address is stored. 255, 77

address space (software). The range of addresses available to a computer program. *See:* addresses; computer program. 434

address, tag. *See:* symbolic address.

ADF. *See:* automatic direction finder.

A-display (radar). A display in which targets appear as vertical deflections from a horizontal line representing a time base. Target distance is indicated by the horizontal position of the deflection from one end of the time base. The amplitude of the vertical deflection is a function of the signal intensity. 13



adjacent channel (data transmission). The channel whose frequency is adjacent to that of the reference channel. 59

adjacent-channel attenuation (receivers). *See:* selectance.

adjacent channel interference (data transmission). Interference, in a reference channel, caused by the operation of an adjacent channel. 59

adjacent-channel selectivity and desensitization (receiver performance) (receiver). A measure of the ability to discriminate against a signal at the frequency of the adjacent channel. Desensitization occurs when the level of any off-frequency signal is great enough to alter the useable sensitivity. *See:* receiver performance. 181

adjoint system. (1) A method of computation based on the reciprocal relation between a system of ordinary linear differential equation and its adjoint. *Note:* By solution of the adjoint system it is possible to obtain the weighting function (response to a unit impulse) $W(T, t)$ of the original system for fixed T (the time of observation) as a function of t (the time of application of the impulse). Thus, this method has

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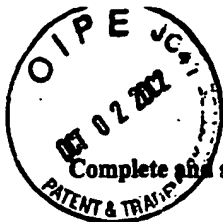
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Stephen C. Jensen (Signature)
Oct 2, 2002 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,444	01/09/2001	Mohamed Kheir Diab	MASIMO.1FW1C4	8786

TITLE OF INVENTION: SIGNAL PROCESSING APPARATUS AND METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$300	\$1580	10/23/2002

EXAMINER	ART UNIT	CLASS-SUBCLASS
WINAKUR, ERIC FRANK	3736	600-330000

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